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To: Provost and Chief Academic Officers

CC: Ohio Mathematics Chairs/Leads

From: Dr. Ricardo Moena, Faculty Lead, Ohio Transfer Module Mathematics, Statistics, and Logic Review Panel/Subgroup 2 of the Ohio Mathematics Initiative Chairs/Leads Network

Date: May 6, 2020

Subject: Announcement of Learning Outcomes for Ohio Transfer Module TMM014 (Technical Mathematics I) and TMM015 (Technical Mathematics II)

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We are pleased to announce new Ohio Transfer Module (OTM) courses in Mathematics, Statistics, and Logic titled TMM014- Technical Mathematics I and TMM015- Technical Mathematics II.

**Background:**

The Ohio Transfer Module (OTM) Subgroup 2, Mathematics, Statistics, and Logic, were tasked with exploring the possibility of a Technical Mathematics course(s) specializing in the application of mathematics for applied degrees. This effort was rooted in future exploration of Ohio Guaranteed Transfer Pathways (OGTP) applied degree pathways.

The Technical Mathematics I (TMM014) learning outcomes are based on college level mathematics and serve the following purposes:

- Act as the first (and possibly only) course in technical mathematics for two-year Associate of Applied Science (AAS) degrees.
- Serve as a pre-requisite for Technical Mathematics II (TMM015)
- Act as a general education course in the spirit of College Algebra that would serve specific programs/degrees that might want a technical-focused QR course.

Technical Mathematics II (TMM015) learning outcomes are also based on college level mathematics and were formulated to serve the following purpose:

- Serve as a pre-calculus option for students interested in pursuing programs such as Engineering where mathematics courses in Calculus, Technical Calculus or Engineering specific Calculus courses are required.

In January 2020, a survey request was distributed statewide to gain endorsement for the proposed criteria of the new Mathematics, Statistics, Logic Ohio Transfer Module (OTM) courses. The subgroup reviewed endorsement survey feedback and in order to address concerns expressed by some institutions, the following updates were taking into consideration:

- Minor language tweaks on several learning outcomes to better articulate functionality
- Suggested range of 4-5 credits for both TMM014 and TMM015
- To assist with institutional course development, illustrations have been created to accompany learning outcomes. Illustrations are suggestions only and not required within your institutions course.

The results of the survey indicated agreement that though a course in Quantitative Reasoning (QR) is appropriate for most non-Calculus students, Technical Mathematics will benefit some majors/degrees/programs. This announcement will assist your institution with course development or refining your course(s) to better align with transfer guarantees. As a result, these OTM courses have been added to the Mathematics, Statistics, Logic Ohio Transfer Module (OTM), effective immediately. Institutions will need to submit course(s) for panel review prior to approval.

Thank you for sharing this memo and attachments with appropriate Mathematics faculty and administrators at your institution.

If you or your OTM coordinator have any questions please contact faculty lead for the Ohio Transfer Module Mathematics, Statistics, and Logic Review Panel/Subgroup 2, Dr Ricardo Moena at [ricardo.moena@uc.edu](mailto:ricardo.moena@uc.edu) or (513) 556-4055 or Jessi Spencer, Director of Articulation and Transfer Policy, Budget, and Constituent Relations at [jspencer@highered.ohio.gov](mailto:jspencer@highered.ohio.gov) or (614) 728-4706.

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